

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-003271**Date Inspected:** 09-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** Don Walton**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Sub-Assemblies (OBG) and Sub-Assemblies**Bid Item:** 77,78,79**Lot No:****Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Sub-Assemblies (OBG)**

Galvanized Traveler Rails (12 Each) and Emergency Access Platform BK-EAP-7, NOI Number 6548: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Galvanized Traveler Rails (12 Each) and Emergency Access Platform BK-EAP-7 for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panels BK4A-062, BK4A-060 and BK5A-002, NOI Number 6549: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panels BK4A-062, BK4A-060 and BK5A-002. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Flumes 2A-5 (2 Each), 2A-1, Suspender Bracket Top Closures SB-106E (2 Each) and SB-106W (2 Each), NOI Number 6550: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control

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representatives observed the surface condition on Flumes 2A-5 (2 Each), 2A-1, Suspender Bracket Top Closures SB-106E (2 Each) and SB-106W (2 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Suspender Brackets SB110E, SB110W and SB108E, NOI Number 6551: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Suspender Brackets SB110E, SB110W and SB108E. ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point due to defects (mud-cracks) in the applied Interzinc 22 undercoating and un-cured Interzinc 52 on surface.

Splices WJSH-0 (2 each), Miscellaneous Splices (7 Each), NOI Number 6552: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Splices WJSH-0 (2 each), Miscellaneous Splices (7 Each). Test results recorded x3 surface profile reading in the range of 79 to 84  $\mu\text{m}$ . No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Flumes (4 Each), NOI Number 6552: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Flumes (4 Each). ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point due to fabrication defects.

BK Brackets (3 Each), NOI Number 6559: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on BK Brackets (3 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness), ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) and ISO 11127-6 and ISO 11127-7 (soluble salts). Test results x2 MEK @ grade 5 and x1 soluble salts reading recorded @ 8.6 ( $\mu\text{s/cm}$ ). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Traveler Rails (8 Each), NOI Number 6560: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Traveler Rails (8 Each). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to mud cracks found in undercoat.

Flumes 2A-5 (2 Each), 2A-1, Suspender Bracket Top Closures SB-106E (2 Each) and SB-106W (2 Each), NOI Number 6561: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Flumes 2A-5 (2 Each), 2A-1, Suspender Bracket Top Closures SB-106E (2 Each) and SB-106W (2 Each). ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point due to fabrication defects and additional required grinding and blasting.

Suspender Brackets SB110E, SB110W and SB108E, NOI Number 6562: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along

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with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Suspender Brackets SB110E, SB110W and SB108E. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Emergency Access Platform Handrails BK-MEP-1 (2 each), NOI Number 6565: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Emergency Access Platform Handrails BK-MEP-1 (2 each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Traveler Rails (8 Each), NOI Number 6568: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Traveler Rails (8 Each). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to mud cracks found in undercoat.

### Sub-Assemblies (Tower)

Skin G Plates SSD1-FGSA6-7 and SSD1-FGSA6-6, Platform Sub-assembly PFA6-1, PFA6-2 and Tower Head Curved Diaphragm Top DPSA6-5, NOI Number T2141: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Skin G Plates SSD1-FGSA6-7, SSD1-FGSA6-6, Platform Sub-assembly PFA6-1 and PFA6-2 for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head Curved Diaphragm Top DPSA6-5, NOI Number T2141: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Head Curved Diaphragm Top DPSA6-5 for dry film thickness (DFT) and final VT compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to debris found in finish coat.

Miscellaneous Sub-Assembly Plates (16 Each), NOI Number T2142: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Miscellaneous Sub-Assembly Plates (16 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Lift 6 Tower Boom Supports ESD1-7BSA7-4 (2 Each), NOI Number T2143: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Lift 6 Tower Boom Supports ESD1-7BSA7-4 (2 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Skirt Plate Externals (5 Each), NOI Number T2144: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Skirt Plate Externals (5

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Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Lift 6 Tower Boom Supports ESD1-7BSA7-4 (2 Each), NOI Number T2145: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Lift 6 Tower Boom Supports ESD1-7BSA7-4 (2 Each). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to additional required grinding and re-blasting.

Man Hole Cover Plates for West Tower WSD1-FASA6-PC6-71 (3 Each), NOI Number T2146: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Man Hole Cover Plates for West Tower WSD1-FASA6-PC6-71 (3 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

**Summary of Conversations:**

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Cason,Kenneth	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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